

## ABSTRACT

A liquid crystal display device having a high quality  
able to prevent deterioration etc. of a liquid crystal  
5 panel even when a liquid crystal panel used in a light  
valve of a projector etc. is operated under a high  
temperature and high humidity environment and a projection  
type display apparatus using the liquid crystal display  
device, wherein a liquid crystal layer 16 is sandwiched  
10 between a pair of substrates formed by bonding a TFT array  
substrate 11 and a counter substrate 12 by a sealing  
material 15 so that they face each other across a  
predetermined gap, the sealing material 15 contains a  
nonconductive filler having a mean particle size of less  
15 than 0.5  $\mu\text{m}$ , a liquid crystal material used in the liquid  
crystal layer 16 is set in its refractive index anisotropy  
 $\Delta n$  at room temperature to 0.16 or more, and a cell gap  $d$  of  
an interval between the TFT array substrate 11 and the  
counter substrate 12 is set at 3  $\mu\text{m}$  or less.